

REMARKS

This is intended as a full and complete response to the Final Office Action dated March 15, 2010, having a shortened statutory period for response set to expire on June 15, 2010. Please reconsider the claims pending in the application for reasons discussed herein.

Claims 4-17 are rejected by the Examiner.

Claims 4-17 and 36-38 remain pending in the application after entry of this response. Claims 4, 7, and 11 have been amended and new claims 36-38 have been added. No new matter has been added by either the amendments or new claims.

Claim Rejections Under 35 USC § 102

Claims 4-17 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,844,397 to *Konecny*. *Konecny* does not teach, suggest, or disclose the voltage remaining at substantially the upper voltage level for first extended periods between successive transitions and the voltage remaining at substantially the lower voltage level for second extended periods between successive transitions interleaved with said first periods, as recited in amended claim 4.

Figures 6, 7A-1 and 7A-2 of *Konecny* show a driving circuit for a submersible pump. A smoothed DC input voltage is provided from a smoothing circuit 606 to an inverter 608 via buses 701 and 702. In addition, the inverter 608 receives rectangular wave PWM signals via inputs 720A - 725A that are designed to produce output waveforms at inverter output nodes 728, 730 and 732 to drive the motor 600 via transformer 610. Column 3, line 63 to column 4, line 6 describe the generation of a triangular wave and three sinusoidal signals and the production of three rectangular wave PWM signals from a sine-triangle comparison.

A sinusoidal voltage waveform does not have a voltage that "remains at substantially an upper voltage level for first extended periods between successive transitions" and that "remains at substantially the lower voltage level for second extended periods between successive transitions interleaved with said first periods".

Further, *Konecny* does not teach, suggest, or disclose the voltage varying progressively during each transition, as recited in amended claim 4. A rectangular PWM signal includes discrete step voltage changes that are not progressive. Therefore, claim 4 and its dependents are not anticipated by *Konecny*.

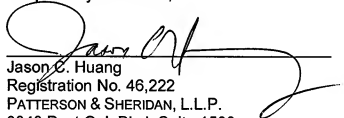
Regarding new claim 37 on its own merit, *Konecny* does not teach, suggest, or disclose the first and second periods each being greater in duration than a transition between the upper and lower voltage levels.

Regarding new claim 38 on its own merit, *Konecny* does not teach, suggest, or disclose a phase (when energised) having the lowest associated current during each transition between the upper and lower voltage levels.

Conclusion

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



Jason C. Huang
Registration No. 46,222
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)